

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY



(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 30 JUN 2006

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Applicant's or agent's file reference cal 00302	FOR FURTHER ACTION See Form PCT/PEA/416	
International application No. PCT/EP2005/002468	International filing date (day/month/year) 07.03.2005	Priority date (day/month/year) 08.03.2004
International Patent Classification (IPC) or national classification and IPC INV. H02J7/00		
Applicant BEGHELLI S.P.A. et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input checked="" type="checkbox"/> sent to the applicant and to the International Bureau a total of 1 sheets, as follows:</p> <p style="margin-left: 40px;"><input checked="" type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p style="margin-left: 40px;"><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand 05.10.2005	Date of completion of this report 29.06.2006	
Name and mailing address of the international preliminary examining authority:  European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer Gentili, L Telephone No. +31 70 340-2872 	

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International application No.
PCT/EP2005/002468

Box No. I Basis of the report

1. With regard to the **language**, this report is based on

- ☒ the international application in the language in which it was filed
- ☐ a translation of the international application into , which is the language of a translation furnished for the purposes of:
 - ☐ international search (under Rules 12.3(a) and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4(a))
 - ☐ international preliminary examination (under Rules 55.2(a) and/or 55.3(a))

2. With regard to the **elements*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

Description, Pages

1-24 as originally filed

Claims, Numbers

1-19 as originally filed

Claims, Pages

1 received on 28.11.2005 with letter of 25.11.2005

Drawings, Sheets

1/15-15/15 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

* If item 4 applies, some or all of these sheets may be marked "superseded."

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-19
	No: Claims	
Inventive step (IS)	Yes: Claims	1-19
	No: Claims	
Industrial applicability (IA)	Yes: Claims	1-19
	No: Claims	

2. Citations and explanations (Rule 70.7):

see separate sheet

Re Item V

**Reasoned statement with regard to novelty, inventive step or industrial applicability;
citations and explanations supporting such statement**

1 Reference is made to the following document:

D1 : US 4 602 203 A (BRAGDON HAROLD W) 22 July 1986 (1986-07-22)

2 Document D1 is regarded as being the closest prior art to the subject-matter of claim 1 and discloses (the references in parentheses applying to this document):
a recharging device of batteries (15) , which can also be used as an exhibitor of battery packs or packagings in sales points (this particular use is not specified in D1, but nothing prevents it), comprising at least a supporting element (17, see also column 2 lines 40-61), which includes a series of seats or housings (86) for the insertion and/or linking of packs of batteries (92) on sale, and means (16,18,20,22,24,26,28,30) for the charging, recharging and/or maintenance of the electric charge, electrically connected to said seats or housings (86) of the recharging device (see column 3 lines 51-63).

The subject-matter of claim 1 differs from this known device in that each pack or packaging of batteries contains a plurality of batteries, connected in series to each other, of which at least two terminals are accessible from the outside of the packaging for connection to the recharging and/or maintenance means of the electric charge.

The subject-matter of claim 1 is therefore new (Article 33(2) PCT).

The problem to be solved by the present invention may be regarded as adapting an available recharging device of D1 for a different type of batteries, having a nominal voltage which is only a fraction of the nominal voltage for which the device had been designed.

The solution to this problem proposed in claim 1 of the present application is considered as involving an inventive step (Article 33(3) PCT) for the following reasons:

- i) D1 does not explicitly mention the possibility of using the charging device for battery packages, rather than for individual battery units
- ii) more evident solutions are available to the skilled person, such as modifying the electronics of the charging units (42 in D1).

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The skilled person would therefore not obtain subject matter of claim 1 without employing an inventive activity.

Claims 2-19 are dependent on claim 1 and as such also meet the requirements of the PCT with respect to novelty and inventive step.

Claims 1-19 find an industrial applicability in the field of battery chargers.

CLAIM

1. A recharging device of batteries (6), which can also be used as an exhibitor of battery packs or packagings (5) in sales points, comprising at least a supporting element (1, 5 17, 51), which includes a series of seats or housings (2, 18) for the insertion and/or linking of packs (5) of batteries (6) on sale, and means (20, 30) for the charging, recharging and/or maintenance of the electric charge, electrically connected to said seats or housings (2, 18) of 10 the recharging device, characterized in that each pack or packaging (5) of batteries (6) contains a plurality of batteries (6), connected in series to each other, of which at least two terminals (7, 8, 80) are accessible from the outside of the packaging (5) for connection to the 15 recharging and/or maintenance means (20, 30) of the electric charge.